MTP41 User Manual

Wideband Wireless

Professional Pocket

Transmitter

SN: _____

Rev.01 (rif. FW 1.11_0D)

Date: 10 June 2013

INTRODUCTION

"MTP41 is an extremely small and light pocket transmitter especially designed for professional wireless microphone applications"

Very easy and quick to use thanks to OLED display, dedicated buttons and a joggle selector.

MTP41 benefits also of the latest Wisycom RF technology along with an enhanced robustness against noise and inter-modulation.

Fig. 1

Turn on wireless:

*Move the Wireless **power switch** in "I" position:*

A green blinking gives you indications on battery status.

Turn on display:

Push <select switch> and hold it.

Open MIC Body:

Push the side buttons and flip down the cover, to access internal setup controls and batteries.

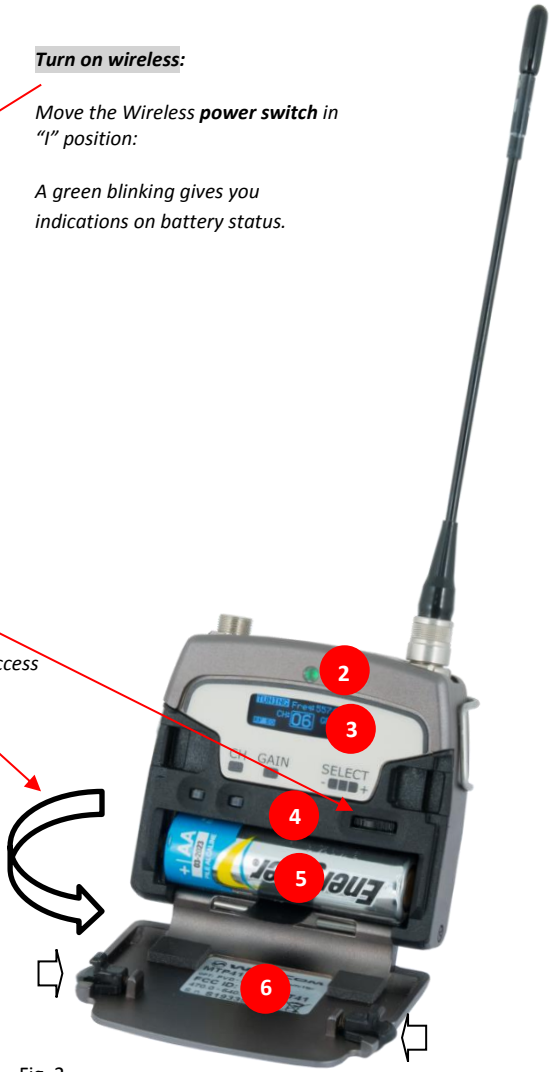


Fig. 2

1. Switch to enable wireless transmission it also indicates the battery status and peak/mute operation (with PTT)
2. LED to show information on RF transmission/battery status/modulation peek/PTT status
3. Oled display for transmitter setup
4. <**ch**>, <**gain**> and 3 positions <selector>
5. Battery holder
6. Cover (to open push side buttons)

SAFETY INSTRUCTION

- Read this safety instruction and the manual first
- Follow all instructions and information.
- Do not lose this manual.
- Do not use this apparatus under the rain or near the water.
- Do not install the apparatus near heaters or in hot environments, do not use outside the operating temperature range.
- Do not open the apparatus, only qualified service technician are enabled to operate on it. The apparatus needs servicing when it is not properly working or is damaged by liquids, moisture or other objects are fallen in the apparatus.
- Use only accessories or replacement parts authorized or specified by the manufacturer.
- Clean the apparatus only with dry cloths, do not use liquids.
- Report the serial number and the purchasing date in front of the manual. It is needed to have proper replacement parts or accessories from the manufacturer.
- When replacement parts are needed, use only replacement parts authorized from the manufacturer. Substitution with not authorized parts could result in electric shock, hazards or fire.
- Keep attention on all the labels with warnings or hazards on the apparatus.

MTP41 TRANSMITTER FEATURES

Led indications

Led indication with bi-colour led (red & green) on front 2:

- Wireless transmission status: green when RF transmission power is on.
- Battery status: green steady, slowly blinking (< 25%), quickly blinking (<12%).
- Modulation peak (if activated): red.
- PTT status: red if active (push to talk “pushed”).

Batteries

MTP41 is working with 1 AA alkaline or NiMH or Lithium battery (select correct type on setup controls). Battery status can be checked on internal OLED display or looking to LED status on front 2.

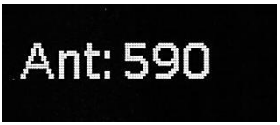
BATTERY SUBSTITUTION

- Open transmitter cover and insert the battery following polarity indicated.

Antennas

MTP41 is supplied with a couple of antennas. According to the working band, different antenna models can be supplied. All the models have black cap and a black label with code in white colour. For more details see the below table.

Band	Range (MHz)	Code
1 470-640 MHz	470-547	507
	547-640	590
2 566-798 MHz	566-672	616
	672-798	732
3 510-698 MHz	510-595	552
	595-698	646



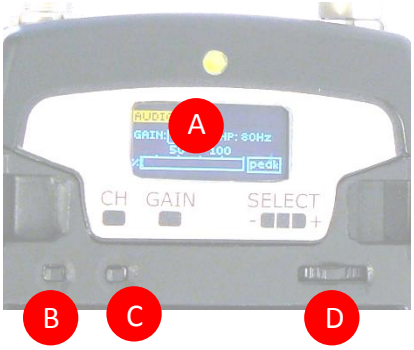
In order to help the user to connect the correct antenna, the display shows the antenna code during the switch on of the transmitter and during the tuning selection after a change of frequency range. *(ex. if the user changes the frequency from 566 to 672 MHz, the display shows Ant. 732)*

Powering up

Move the wireless power switch (see Fig. 1) in "I" position to activate wireless transmission: the front green LED 2 lights up (blinking when battery is low!)

Setup control

Open transmitter Body to access the "display and controls" area (Fig. 3):



A. Graphics Display (**OLED**)
B. Channel selection buttons (**ch**)
C. MIC gain setup buttons (**gain**)
D. 3 position selector (**up** / **down** / **click**)

Fig. 3

OLED Power UP (OLED IS IN OFF CONDITION)

Pushing down selector (**click**), oled turns on. A first menu with Serial Number and brand logo is displayed, then <status> menu enters automatically.

Turn on the transmitter pushing and holding selector (**click**) > 2 sec, Serial Number menu is displayed till (**-/+**) is selected.

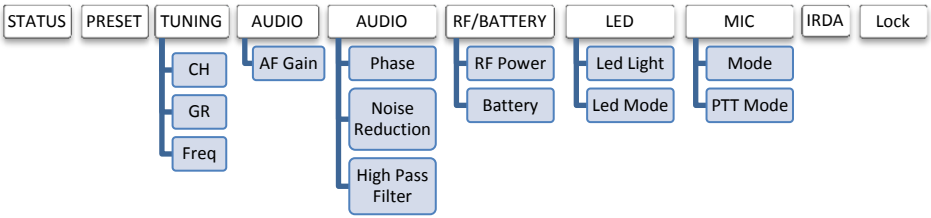
OLED Power DOWN (OLED IS IN ON CONDITION)

Pushing and holding selector (**click**) > 2 sec, display is turned off.

Display turns off automatically after 15 sec, unless in <IRDA> menu or in <AUDIO> menu (with audio level < 5% from nominal).

MENU NAVIGATION

Setup menu are accessed in sequence:



Using <+/-> selector all menus can be accessed in sequence, push <click> to enter edit mode:

<+/-> to setup field
<click> again to confirm changes and exit.
exit without confirmation if no button is pressed after a few seconds time out.

<START UP> menu

These menus are displayed during power up for few seconds.

	First one gives information of antenna to be used. The number displayed is the center-band of the antenna to be used.
	The second menu gives indication on product: - product id (MTP41), - a number which identify the working band

1	470-640
2	566-798
3	510-698

- a number which identify the hardware version
- the firmware release (ex. *110.0F*),
- the band in extended format and
- the serial number.

Keep selector pushed to hold this menu!

<STATUS> menu

This is the first menu displayed after power up.

Major info are displayed:

- Current channel/group (i.e. CH:00 GR:39)
- Current frequency (i.e. 566.000 MHz)
- Mic gain (i.e. AF: +00dB) and high pass filter (i.e. HP:60 Hz)
- "RF 50" or "RF 10" on top right if RF transmission is on at high or low power respectively
- On left side, the battery bar is displayed

<PRESET> menu

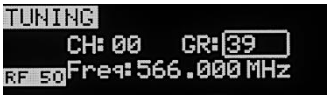
This menu can be entered by scrolling selector, or pushing **at the same time** both quick channel setup buttons (<**ch**> & **<gain>**).

MTP41 can recall configuration presets. "FACTORY" recalls the Wisycom factory configuration. "USER" recalls the user configuration (the transmitter configuration is copied into the USER using the "save to" submenu). All "USER" menus are not locked by default, thus this is quick way to unlock features!

The other 8 configuration presets are user programmable thru the infrared and the PC interface (using the programmer UPK 300 or the receiver MRK950/MRK960). All parameters can be "left unchanged", "changed" or "changed and lock", allowing a very flexible way to pre-program MTP41 configuration.

<TUNING> menu

This menu can be entered by scrolling selector or using *quick channel setup* buttons (<**ch**>).



In this menu current channel/group and frequencies can be setup. Use the selector to change values (<**+/-**>) and <**click**> to confirm.
Sync group is a quick self-settable channel synchronized by receiver.

Using quick channel setup buttons (<**CH>**), it is possible to enter quickly in the tuning menu. Note that the menu has a different layout (see the side image)

<AUDIO> menu

This menu can be entered by scrolling selector.
"**AF Gain**" setup to tune audio input sensitivity:

To help proper audio gain setting, an audio bar is supplied with peak hold bar) indicating the headroom to audio peak (0 dB).

AF gain is shown with 2 different unit of measurements dB (gain in dB of MTP41 amplifiers) or in dBu peak.

Using quick gain setup buttons (<**GAIN**>), it is possible to enter quickly in the audio gain menu. Note that the menu has a different layout (see the side image)

The second <AUDIO> menu allows to set:
- audio phase (0° or 180°)
-Noise reduction:
  - ENR: designed for maximum noise reduction
  - ENC: designed for maximum audio fidelity (use this in case of special vocal application or to remote instruments)

-High Pass Filter: applies different audio HP filter:
Flat /60Hz /80Hz/120Hz /170Hz /250Hz /400Hz.

Use the selector to change values (<**+/-**>) and <**click**> to confirm.

<RF/BATTERY> menu

This menu can be entered by scrolling selector.

RF power can be setup to 50 mW or 10 mW.
Use the Battery menu to select the type of battery used.
MTP41 support Alkaline/NiMH/Lithium battery type.
Use the selector to change values (<**+/-**>) and <**click**> to confirm.

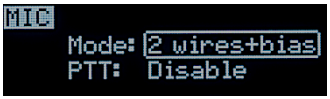
<LED> menu

This menu can be entered by scrolling selector.

Led Light allows to change the brightness of the front led (0÷16) .
Led Mode:
- ModPeak: allows to enable modulation peak LED on front led (become RED when audio get close to saturation)
- none: allows to disable modulation peak LED on front led
- PTT: allows to enable RED color on front led when PTT button is pushed.

<MIC> menu

This menu can be entered by scrolling selector.

	**Mode**: Following Mic mode can be setup (for LEMO option) **-2 wires:** (PTT is possible) for external audio input **-2 wires + bias:** (PTT is possible) for most 2 wires MIC **-3 wires:** (no PTT) for most 3 wires MIC
PTT setting defines how and what information the transmitter has to send in normal use or when the PTT button is pushed. **- Disable**: when the PTT button is pushed, nothing happen. (the transmitter sends AF+Tone squelch) **- Normal**: when the PTT button is pushed, the transmitter send a different RF signal. According to the receiver configuration the audio can be enabled/disable on LINE (and/or COM). **- Muting**: the transmitter doesn't send the audio. The voice is cut, it doesn't enter to the microphone **- No Data**: the transmitter sends neither tone squelch nor battery data. Use the selector to change values (<**+/-**>) and <**click**> to confirm.	

NOTE: For DPA option (2 pin microdot audio connector), even if the MIC mode menu allows to set one of the 5 MIC modes, only **2 wires** or **2 wires+bias** mode are possible.

<IRDA> menu

This menu can be entered by scrolling selector.

	While is this menu MIC can be connected to IRDA for setup or firmware upgrades. NOTE: while in this menu display is not automatically turned off.

<LOCK> menu

This menu can be entered by scrolling selector.

	Long pressing (2 sec.) selector button (**click**) it locks MTP41 in transmission mode. To unlock, long pressing (2 sec.) selector button again.

<BOOTLOAD> menu

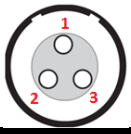
This menu can be entered only turning on the transmitter while pushing **at the same time** both quick channel setup buttons (<**ch**> & **<gain>**).

	Device is forced in bootloader mode to allow **FIRMWARE UPDATE**.

The following table sums up which parameters can be set and the related range settings.

MENU	PARAMETER	MEANING	RANGE SETTINGS
TUNING	CH	Channel	0 ÷ 59
	GR	Group	0 ÷ 39 + SYNC GROUP
	Freq	Frequency	depends on the MTP41 Model: 1 470-640 2 566-798 3 510-698
AUDIO	AF In Gain	Gain of the audio signal	-60dB ÷ 40dB step of 1 dB
	Phase	Audio signal phase	0° or 180°
	Noise R.	Noise reduction	ENR: Wisycom Extended-NR,noise optimized ENC: Wisycom Extended-NC,voice optimized
	HP Filt.	High Pass filter	Flat/60/80/120/170/250/400 Hz
RF/BATTERY	RF Power	RF Power	50 mW or 10 mW
	Battery	Battery type	Alkaline / NiMH / Lithium
LED	Led Light	Power switch green brightness	0 ÷ 16
	Led Mode	It defines when the power switch led (see Fig. 3) has to become RED	None: never ModPeak: when audio get close to saturation PTT: when the PTT button is pushed
MIC	Mode	MIC type	'2 wires' '2 wires + bias' '3 wires'
	PTT Mode	It defines how and what information the transmitter has to send	**Disable**:when the PTT button is pushed, nothing happen. (the transmitter sends AF+Tone squelch) **Normal**: when the PTT button is pushed, the transmitter send a different RF signal. According to the receiver configuration the audio can be enabled/disable on LINE (and/or COM). **Muting**: the transmitter doesn't send the audio. The voice is cut, it doesn't enter to the microphone **No Data**: the transmitter sends neither tone squelch nor battery data.

MIC Mode setting (only for LEMO option):

MIC Mode:	Pin out 	Gain	PTT	Led Mode
’2 wires’:	1=GND 3=AF	-60/40 dB	Disable Normal Muting No data	None Mod. Peak PTT
‘2 wires + bias’:	1=GND 3=AF+5.5V	-60/40 dB	Disable Normal Muting No data	None Mod. peak PTT
‘3 wires’:	1=GND 2=5.5V 3=AF	-60/40 dB	Disable No data	None Mod. peak

WISYCOM IR PROGRAMMER (VER. 1.3.2.0 AND ABOVE)

Wisycom IR Programmer allows to read, modify and update the MTP41 device configuration.

It is necessary to

- install Wisycom IR Programmer (version 1.3.2.0 or above)
  WARNING: If it is the first installation and Wisycom USB driver has not already installed in the PC, install the USB driver (run *C:\Program Files (x86)\Wisycom\MTP&MTH Infrared Programmer (TX)\Drivers\ DriverInstaller.exe*)
- connected the programmer UPK300 or the receiver MRK950/MRK960 to the PC thru **USB connection**
- run the program
- enable the IRDA communication on the transmitter (see IRDA menu)

NOTE: Wisycom IR Programmer doesn't work whit MRK950/MRK960 if it is connected to the PC using an ethernet cable.

The Wisycom IR Programmer's window is divided in 4 parts (see Fig. 5):

1 **Interface** and **Device** panel contains all the major information of the connected **d**evice

2 **Current Settings** panel shows the current configuration. Thanks the PRESET panel, a previous saved configuration can be chosen and loaded like current setting.

3 **Tuning Frequencies** panel allows to handle Groups, Channels and Frequencies

4 **Presets** panel allows to read, change and save different configurations

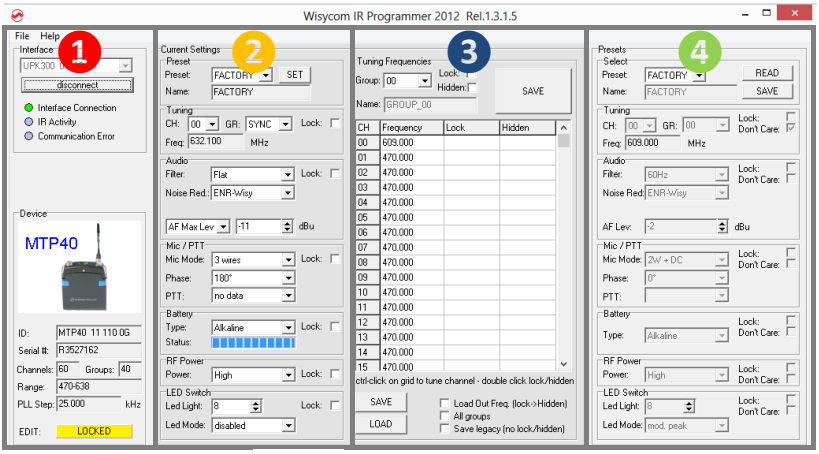


Figure 5: Wisycom IR Programmer's window

10 different configurations are available:

- FACTORY configuration is a locked configuration: no parameter can be changed.
- USER configuration is the only configuration that can be saved using the OLED display (see <PRESET> menu). Note: It is not possible to change the name of this configuration.
- Other 8 configurations where the user can change both the name and the values of all parameters.

INTERFACE AND DEVICE PANEL

At the beginning, the program checks which IR devices are detected and they appears on the **Interface** panel.

The user has to select the device and push <connect> button in order to open the communication with the IR device. A picture on the top in the Interface panel help the user in this selection showing the type of devices detected. During this process the "IR activity" led blinks to indicate that the program wait connection's answer from the IR device.

A successful connection is signaled with the "interface connection" green led, while a failed connection is signaled with the "communication error" led.

Once a supported device is found, the software automatically reads all the data related to the remote configuration, as well as the frequencies that are pre-programmed.

Firstly, in order to avoid unwanted operation, no parameters can be changes and the EDIT button, presents on the bottom of **Device** panel, is yellow and set to LOCKED state. Pushing the EDIT button, it becomes grey and sets to UNLOCKED state to indicate that the configurations can be modified.

CURRENT SETTINGS PANEL

In the Current Settings panel the user can

- with Preset panel → load one of the 10 available configurations
- with other panels → modify all the configuration's parameters (the same that are changeable in the OLED display). Each parameter can be locked clicking the related lock button, so the set value can not be changed next using the OLED display.

ATTENTION: All the modifies applied to the Current Settings panel are instantaneous: they are applied directly to the device and save in its memory but no saved in the preset configuration.

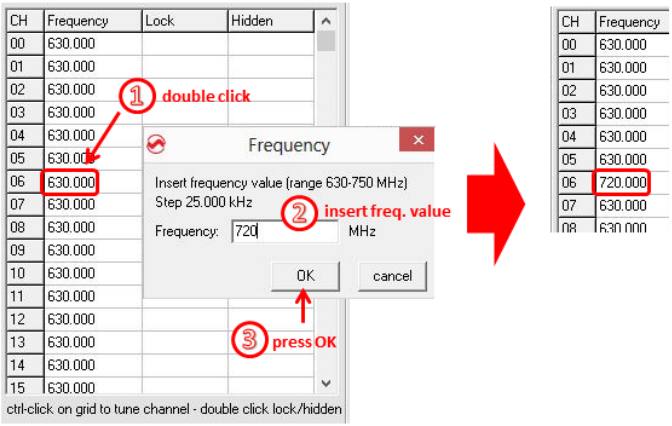
TUNING FREQUENCIES PANEL

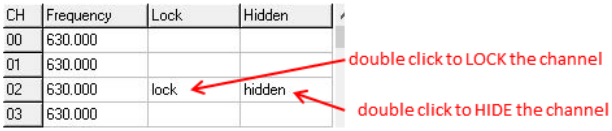
With the Tuning Frequencies panel the user can select a frequencies group (0÷39) and for each one execute the following operations:

- modify the Group's Name
- lock and/or hidden the group
- for each channel (0 ÷59) of the selected group: change the frequency value and the related status (locked/hidden) (in the center grid frequency)

The SAVE button, at the top of the panel, save the changes of the group selected (name group, lock/hidden group).

To change a frequency value for a specific channel: double click on the grid frequency panel (row=channel's number), insert the new frequency value and press OK button.

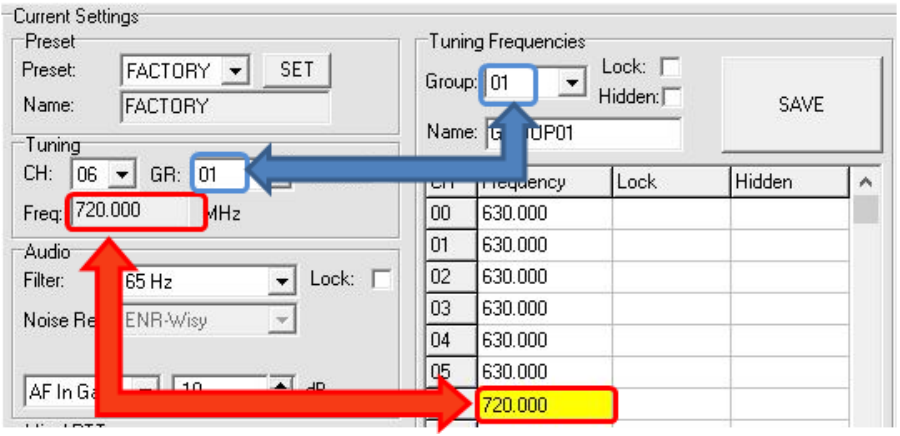




To lock/hide a specific channel, double click on the grid frequency panel.

NOTE: keeping pressed the CTRL button on the keyboard and clicking the wanted channel/group shown on the frequencies grid, the tuning process is executed. It is equivalent to configure the Tuning in the Current Settings panel but it is easier. The device is re-tuned immediately, so be sure that the RF power is turned off while changing frequencies with other RF systems in use around you!

If the currently tuned channel is on the same group that is listed on the grid, the background color of the related cell (channel) on the grid becomes yellow.



Using the LOAD/SAVE button, at the bottom of the panel, it is possible to **load/save** the frequencies for the selected group from/to a .wdf file. To save the frequencies of all the groups click to the related button above. The legacy option save the channels without the hidden/lock info.

PRESETS PANEL

The Preset panel allows to manage all the 10s available configurations.
For each configuration it is possible to set the name and all the parameters value except for FACTORY and USER configurations (see table below).

PRESETS:	NAME*	LOCK/DON'T CARE	PARAMETERS VALUE
FACTORY			
USER			√
OTHERS	√	√	√

√=change is allowed

* Be careful to write a meaningful name for the preset because the name will appear on the settings list of the device menu! Please, avoid empty names.

If a parameter is "locked", it cannot be modified by device menu (using OLED display), while if "don't care" propriety is active, when the user load the configuration, the parameter's value doesn't changed.

ATTENTION: Changes are applied only after a "save" action.
NOTE: *"a trick"* In case of the user have a locked parameter and he is in great need for modify it, he can save the configuration to USER configuration by OLED (see PRESET menu) and then load the USER configuration (in this way all the parameters have the lock propriety disable and the user can modify all the parameters).

FILE MENU

Using a file menu at the top left of the panel it is possible to **load/save all the configuration** values of the device to/from a .wcf file (Wisycom Configuration File).

Save a .wcf file

With an infrared device correctly connected, select File->Save User Configuration and select the destination file.

Load a .wcf file

To load a user configuration select File->Load User Configuration and select a previously saved data file; a form will be shown, where it's possible to select which data has to be restored and which skipped. This allow the user to load a particular configuration while keeping other data.

TECHNICAL SPECIFICATIONS

Switchable channels	2400 allocated by 40 groups of 60 channels (in specific frequency range), quickly selectable with dedicated buttons
Switching window	Up to 90 MHz, depending on band (see below code table)
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)
Frequency stability	▪ ± 2,5 pap (in the rated temperature range) ▪ ± 2.5 kHz (in the rated temperature range)
Temp.range	-10 ÷ +55 °C
Max RF power	▪ 50 mW (ERP) when high power selected ▪ 10 mW (ERP) when low power selected
Spurious emissions	< 2 nW
Modulation	wideband FM, with 50 µs pre-emphasis
Nominal deviation	±40 kHz (Peak deviation = ±56 kHz)
Telemetry feature	MTP41 transmits also a digitally modulated sub-carrier, suitable for: ▪*tone-squelch operating* ▪ *remote battery monitoring* ▪ *optional PTT (push to talk) operation*
AF input connector **LEMO option**	Configurable on 'mic' display menu in 3 options: ▪ *'2 wires'*: gain selectable -60 ÷ +40 (-54 dBu ÷ +26 dBu peak), no bias voltage ▪ *'2 wires + bias'*: gain selectable -60 ÷ +40 (-54 dBu ÷ +6 dBu peak), 5.5 V on 4k7 bias supply ▪ *'3 wires*: gain selectable -60 ÷ +40 (-54 dBu ÷ +26 dBu peak)
AF input level	100 dB adjustable range from -60 dBu (775 uV) to 26 dBu (15.5 V) at peak deviation (1 kHz), adjustable in 1 dB steps
Max. input level	+26 dBu (15.5 V) at clipping, +20 dBu (7.75 V) at nominal level
Noise-Reduction	ENR (Wisycom Extended-NR), with independent Attack- and Recovery-time, noise optimized ENC (Wisycom Extended-NC), with independent Attack- and Recovery-time, voice optimized & with reduced pre-emphasys
AF bandwidth	▪ 45 Hz ÷ 21 KHz (3dB) ▪ 55 Hz ÷ 20 KHz (1dB)
Distortion	< 0.3 % (0.15 % typ.)
Signal-to-noise ratio	▪ typ. 115 dB $(A)_{rms}$ with 40 kHz deviation ▪ typ. 121 dB $(A)_{rms}$ with 56 kHz deviation
Led	Led indication with bicolor led (red & green) on wireless power switch: ▪ Wireless transmission status: *GREEN* on/off ▪ Modulation peek (if activated): *RED* ▪ Battery lifetime status: *GREEN* - steady (> 25%) - slowly blinking (< 25%) - quickly blinking (<12%) ▪ Ptt status: *RED* if active
Display	High contrast OLED (Organic light-emitting diode) bicolor display (96 x 36 pixels) 8 step battery lifetime indication: 7 bars (100%-87%-75%-63-50%-38%-25%) and "empty bar" quickly blinking (12% remaining)
PTT function	Pin 3 of the AF connector can be setup to an external push button
Power supply	1 AA size batteries (Alkaline, rechargeable NiMH, Lithium)
MTP41 Battery life	▪ approx. 11 hours @ 50mW continuous working Lithium ▪ approx. 8 hours @ 50mW continuous working with NiMH ▪ approx. 4.5 hours @ 50mW continuous working with Alkaline

Dimensions	58.2 x 64.5 x 21.7 mm (Height-Width-Depth)
Weight	Approx. 80 g. without batteries (120g with batt.)

Note: *MTP41 transmitter complies with ETS 300 422*

OPTION CODE MTP41-X-YZ :

▪ **AUDIO CONNECTOR (-X)**

L 3 PIN LEMO CONNECTOR
(use FVB.00.003.NLN on Mic)
D 2 PIN MICRODOT CONNECTOR

▪ **FREQUENCY RANGE (-Z)**

1	470-640 MHz
2	566-798 MHz
3	510-698 MHz

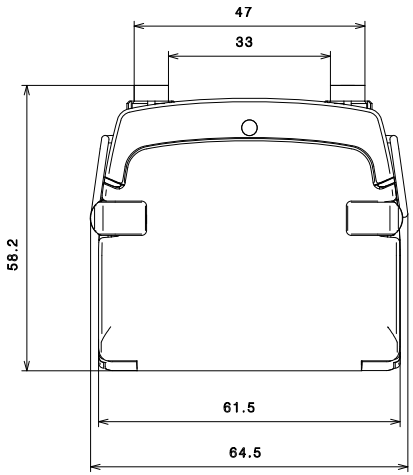
▪ **COLOR (-Y)**

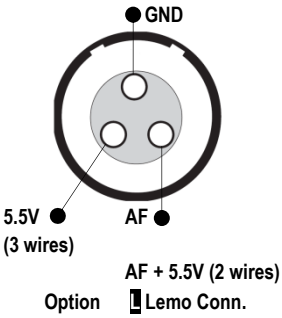
B body color "matt black"
P body color "titanium gray" (ceramic coating)

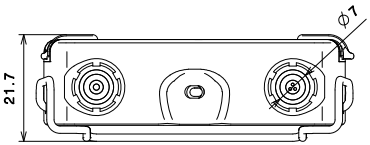
▪ **OTHER OPTIONS (-O)**

ADT Compatible with dummy batt. pack

Ex. **MTP41-L-B1** is 3 pins LEMO connector , matt black color and 470-640 Mhz frequency range







DECLARATION OF CONFORMITY

DICHIARAZIONE DI CONFORMITA'
DECLARATION OF CONFORMITY

Il sottoscritto, rappresentante il seguente costruttore
The undersigned, representative of the following manufacturer

WISYCOM S.r.l.
via Spin, 156 - 36060 Romano d'Ezzelino (VI) - Italy

DICHIARA che l'apparecchiatura descritta in appresso:
DECLARES that the product:

Descrizione *Description*	Pocket trasmitter
Modello *Model*	MTP41

è conforme alle disposizioni legislative che traspongono le seguenti direttive:

- **direttiva 2004/108 CE (Direttiva EMC)**
- **direttiva 2006/95 CE (Direttiva Bassa Tensione)**
- **direttiva 99/5 CEE (Direttiva Apparecchiature Radio)**

is in accordance with the following Directives:

- ***2004/108 EC Directive (EMC Directive)***
- ***2006/95 EC Directive (Low Voltage Directive)***
- ***99/5 EEC (Radio Equipment Directive)***

e che sono state applicate tutte le norme e/o specifiche tecniche di seguito indicate
and that all the following standards have been applied

EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011

EN 301 489-1 V1.9.2

EN 301 489-9 V1.4.1

EN 300 422-2 V1.3.1

Luogo *Place*	Romano D'Ezzelino
Data *Date*	5 June 2012
Firma *Sign* (nome e funzione) *(name and title)*	Franco Maestrelli WISYCOM s.r.l. Franco Maestrelli Amministratore Unico

ENVIRONMENTAL INFORMATION

Applicable in the European Union and other European countries with separate collection systems

Disposal of Old Electrical & Electronic Equipment (2002/96/EC)

This symbol indicates that this products shall not be treated as household waste. Instead it shall be handed over to the appropriate collection point for the recycling of electrical and electronic equipment. The recycling of material will help to conserve natural resources.

Disposal of waste batteries (2006/66/EC)

This product may contain batteries. If so, this symbol on the batteries means that they shall not be disposed with other household waste. Instead it shall be handed over to the appropriate collection point for the recycling of batteries.

ITALY ONLY

Obblighi di informazione agli utilizzatori

ai sensi dell'art. 13 del Decreto Legislativo 25 luglio 2005, n. 151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonché allo smaltimento dei rifiuti"

Smaltimento di apparecchiature elettriche ed elettroniche di tipo professionale

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.

La raccolta differenziata della presente apparecchiatura giunta a fine vita è organizzata e gestita dal produttore. L'utente che vorrà disfarsi della presente apparecchiatura dovrà quindi contattare il produttore e seguire il sistema che questo ha adottato per consentire la raccolta separata dell'apparecchiatura giunta a fine vita.

L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura.

Lo smaltimento abusivo del prodotto da parte del detentore comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

Smaltimento batterie usate

Questo prodotto può contenere batterie. Questo simbolo apposto sulle batterie significa che non possono essere smaltite insieme a normali rifiuti domestici, bensì devono essere depositate negli appositi punti di raccolta delle batterie.

Iscrizione al Registro A.E.E. n. IT09100000006319

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WISYCOM srl
Via Spin 156 • I-36060 Romano d'Ezzelino • Italy
Tel. +39 -0424 -382605 • Fax +39 - 0424 - 382733
www.wisycom.com • e-mail: sales@wisycom.com